APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,639	10/09/2003	Roland Rick	030147	1179

23696 7590 01/10/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121	EXAMINER
	PHU, SANH D

ART UNIT	PAPER NUMBER
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/10/2007.

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	Application No.	Applicant(s)
Office Action Summary	10/683,639	RICK ET AL.
	Examiner	Art Unit	
	Sanh D. Phu	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _09 October 2003_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-32_ is/are pending in the application.

    4a) Of the above claim(s) _8-11,18-22,26-28,31 and 32_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-7,12-18,23-25,29 and 30_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to Election filed on 11/20/06.

Accordingly, claims 1-7, 12-18, 23-25, 29 and 30 are elected; and claims 8-

11, 19-22, 26-28, 31 and 32 are withdrawn from further consideration.

Claim Rejections – 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by
> the manner in which the invention was made.

3.   Claims   1-7, 12-18, 29 and 30   are rejected under 35 U.S.C. 103(a)

as being unpatentable over Karlsson (5,640,677), in view of Bottomley

(6,473,602).

-Regarding to claim 1, see figure 11, col. 11, lines 23-35, col. 13, line 41

to col. 14, line 30, Karlsson discloses a method (see figure 11) which is

configurable to comprise:

procedure (inherently included in (124)) of measuring power of a first

signal (being listed in list "CANDIDATE LIST" (see (129)), associated with a first

cell of a system; and

procedure (inherently included in (124)) of measuring power of a second

signal (being listed in list "CANDIDATE LIST") associated with a second cell of

the system, the second cell being adjacent to the first cell in term of frequency

(see col. 11, lines 23-25).

Karlsson further teaches that during an evaluation of handoff likelihood

in a mobile during an idle period, in the list "CANDIDATE LIST", the first signal

and the second signal can happen to be ones with measured power more than a

threshold value "THRESHOLD" (see (127)) and the first signal is selected to

provide maximum efficiency and channel utilization after a procedure of sorting

the list "CANDIDATE LIST" (see (136, 137)) wherein the first signal can be

selected because of having the highest measured power (see col. 11, lines 23-

35, col. 13, line 41 to col. 14, line 30); and Karlsson further teaches that the list

"CANDIDATE LIST" having values indicative of the measured power of the

second signal and other candidate signals is cleared out, (namely, these values

are set to negligible values), after the selection of the first signal (see (123,

124, 125)).

Therefore, it can be said here that Karlsson teaches procedure of setting

a value indicative of the measured power of the second signal to a negligible

value after the selection of the first signal, wherein/when the measured power

of the second signal is more than the threshold value and less than the

measured power of the first signal.

Karlsson does not teach the system is FDMA system and the second cell

being adjacent to the first cell in terms of frequency.

However, using FDMA in cellular systems is well-known in the art. For

instance, Bottomley has such a teaching (see col. 1, lines 7-16).

For an application, it would have been obvious for a person skilled in the

art to implement Karlsson system as a FDMA system, as taught by Bottomley,

which utilizes FDMA schemes, so that Karlsson system in view of Bottomley

would obtain an optimized channelization of system bandwidth.

-Regarding to claim 2, Karlsson teaches that the system is a system for mobile communications, (considered here equivalent with the limitation "global system for mobile communications (GSM) system") (see figure 1).

-Regarding to claim 3, Karlsson teaches that the negligible value is a cleared out value (see (125) of figure 11), (considered here equivalent with the limitation "the negligible value is approximately equal to zero").

-Regarding to claim 4, Karlsson in view of Bottomley does not teach that the threshold is in a range of approximately 10 to 20 decibels, as claimed.

Since Karlsson in view Bottomley does not set a particular value of the threshold, it would have been obvious for a person skilled in the art, when carrying out Karlsson invention in view of Bottomley with certain system requirements, to set the threshold in range of approximately 10 to 20 dB/dBm or in another certain range, based upon the system requirement so that the system requirement would be met.

-Regarding to claim 5, Karlsson in view of Bottomley does not teach that the threshold is approximately 15 decibels, as claimed.

Since Karlsson in view Bottomley does not set a particular value of the

threshold, it would have been obvious for a person skilled in the art, when

carrying out Karlsson invention in view of Bottomley with certain system

requirements, to set the threshold approximately 15 dB/dBm or with another

value, based upon the system requirement so that the system requirement

would be met.

-Regarding to claim 6, as applied for claim 1, Karlsson in view of

Bottomley teaches procedure of measuring power of a plurality of signals (the

first signals and second signals) associated with a plurality of cells of the FDMA

system; and setting a value indicative of a measured power of a given one

(second signal) of the signals associated with a given cell to a negligible value

when the measured power of the given signal (second signal) is more than a

threshold value and less than a measured power of another one (first signal) of

the signals associated with an adjacent cell to the given cell.

-Regarding to claim 7, as applied in claim 1, Karlsson teaches procedures

of prioritizing the plurality of signals based on values indicative of the

measured power of the signals; selecting a desirable one of the cells based at

least in part on the prioritization (see (136, 137, 123) of figure 11, and col. 14,

lines 30); and registering (inherently included) with a network associated with

the desirable cell via "handoff requests" (see col. 8, lines 22-65).

-Regarding to claim 12, as similarly applied to claims 1-7 set forth above

and herein incorporated, see figure 11, col. 11, lines 23-35, col. 13, line 41 to

col. 14, line 30, Karlsson discloses a subscriber unit "mobile" (see col. 13, line

44) of a system comprising:

a receiver (inherently included) to receive a first signal associated with a

first cell of the system and a second signal associated with a second cell of the

system, the second cell being adjacent to the first cell in terms of frequency

(see col. 11, lines 23-25); and

a control unit (inherently included) to measure power of the first and

second signals and set a value indicative of the measured power of the second

signal to a negligible value when the measured power of the second signal is

more than a threshold value and less than the measured power of the first

signal (see figure 11).

Karlsson does not teach the system is FDMA system and the second cell

being adjacent to the first cell in terms of frequency.

However, using FDMA in cellular systems is well-known in the art. For

instance, Bottomley has such a teaching (see col. 1, lines 7-16).

For an application, it would have been obvious for a person skilled in the

art to implement Karlsson system as a FDMA system, as taught by Bottomley,

which utilizes FDMA schemes, so that Karlsson system in view of Bottomley

would obtain an optimized channelization of system bandwidth.

-Claim 13 is rejected with similar reasons set forth for claim 2.

-Claim 14 is rejected with similar reasons set forth for claim 3.

-Claim 15 is rejected with similar reasons set forth for claim 4.

-Claim 16 is rejected with similar reasons set forth for claim 5.

-Claim 17 is rejected with similar reasons set forth for claim 6.

-Claim 18 is rejected with similar reasons set forth for claim 7.

-Regarding to claim 29, as similarly applied to claims 1-7, 12-18, set

forth above and herein incorporated, see figure 11, col. 11, lines 23-35, col.

13, line 41 to col. 14, line 30, Karlsson discloses a subscriber unit "mobile" (see

col. 13, line 44) of a system comprising:

means (inherently included) for receiving a first signal associated with a

first cell of the system and a second signal associated with a second cell of the

system, the second cell being adjacent to the first cell in terms of frequency

(see col. 11, lines 23-25); and

means (inherently included) for measuring power of the first and second

signals and setting a value indicative of the measured power of the second

signal to a negligible value when the measured power of the second signal is

more than a threshold value and less than the measured power of the first

signal (see figure 11).

Karlsson does not teach the system is FDMA system and the second cell

being adjacent to the first cell in terms of frequency.

However, using FDMA in cellular systems is well-known in the art. For

instance, Bottomley has such a teaching (see col. 1, lines 7-16).

For an application, it would have been obvious for a person skilled in the

art to implement Karlsson system as a FDMA system, as taught by Bottomley,

which utilizes FDMA schemes, so that Karlsson system in view of Bottomley

would obtain an optimized channelization of system bandwidth.

-Claim 30 is rejected with similar reasons set forth for claims 2 and 4.

4.   Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Karlsson in view of Choi (2003/0224790) and Bottomley.

-Regarding to claim 23, as similarly applied to claims 1-7 and 12-18 set

forth above and herein incorporated, see figure 11, col. 11, lines 23-35, col.

13, line 41 to col. 14, line 30, Karlsson discloses a method comprising a

subscriber unit "mobile" of a system to measure power of a first signal

associated with a first cell of the FDMA system; measure power of a second

signal associated with a second cell of the FDMA system, the second cell being

adjacent to the first cell in terms of frequency; and set a value indicative of the

measured power of the second signal to a negligible value when the measured

power of the second signal more than a threshold value and less than the

measured power of the first signal.

Karlsson does not teach a computer-readable medium comprising

instructions to cause the subscriber unit to perform the procedures of the

method.

However, implementing a system with computer-readable medium

comprising instructions to cause the system to perform a method for its

operation is well-known in the art. For instance Choi has such the teaching

(see [0045, 0046]).

It would have been obvious for a person skilled in the art to implement

Karlsson with a computer-readable medium comprising instructions to cause

the subscriber unit to perform the procedures of the method, as taught by

Choi, so that with such the implementation, Karlsson invention in view of Choi

would be enhanced with features of programmability in high speed fashions.

Karlsson in view of Choi does not teach the system is FDMA system and

the second cell being adjacent to the first cell in terms of frequency.

However, using FDMA in cellular systems is well-known in the art. For

instance, Bottomley has such a teaching (see col. 1, lines 7-16).

For an application, it would have been obvious for a person skilled in the

art to implement Karlsson system in view of Choi as a FDMA system, as taught

by Bottomley, which utilizes FDMA schemes, so that Karlsson system in view of

Choi and Bottomley would obtain an optimized channelization of system

bandwidth.

-Claim 24 is rejected with similar reasons set forth for claim 2.

-Claim 25 is rejected with similar reasons set forth for claim 4.

Conclusion

5.   Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Sanh D. Phu whose telephone number

is (571)272-7857. The examiner can normally be reached on M-Th from 7:00-

17:00.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-

4177. The fax phone number for the organization where this application or

proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

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Sanh D. Phu
Examiner
Division 2618

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SP

12/06/06

SANH D. PHU
PATENT EXAMINER